

Amendments to the Claims:

The text of all pending claims, (including withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (canceled), (withdrawn), (new), (previously presented), or (not entered).

Applicants reserve the right to pursue any canceled claims at a later date.

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1.-14. (cancelled)

15. (currently amended) A fuel injection system, comprising:
a fuel reservoir;
a first pump connected to the fuel reservoir for feeding a fuel to the fuel reservoir;
a plurality of injectors connected to the fuel reservoir for discharging the fuel from the fuel reservoir; and

a control and regulation device connected to the first pump for controlling the first pump, the control and regulation device configured to adjust a feed pressure of the first pump based on a fuel temperature and a vaporization characteristic of the fuel, wherein the vaporization characteristic of the fuel is determined by the control and regulation device using an output signal of a Lambda probe.

16. (previously presented) The fuel injection system in accordance with claim 15, wherein the vaporization characteristic of the fuel is determined by the control and regulation device based on a mathematical vaporization model.

17. (canceled).

18. (previously presented) The fuel injection system in accordance with claim 15, wherein the feed pressure is adjusted to an as low as possible minimum pressure value such that cavitation caused by vaporization of the fuel is avoided.

19. (previously presented) The fuel injection system in accordance with claim 15, wherein the fuel temperature is determined by the control and regulation device based on a mathematical temperature model.

20. (previously presented) The fuel injection system in accordance with claim 15, wherein the fuel temperature is acquired by a temperature sensor and fed to the control and regulation device.

21. (previously presented) The fuel injection system in accordance with claim 15, wherein the vaporization characteristic of the fuel is determined using a fuel volume adaptation algorithm.

22. (previously presented) The Fuel injection system in accordance with claim 15, further comprising a second pump connected to and arranged downstream of the first pump relative to a fuel pumping direction, wherein the first pump is a low-pressure pump.

23. (previously presented) A method of determining a feed pressure of a first pump of a fuel injection system, the fuel injection system having a fuel reservoir to which fuel is fed via the first pump and from which fuel is discharged via a plurality of injectors, comprising adjusting the feed pressure by a control and regulation device based on a fuel temperature and a vaporization characteristic of the fuel, wherein the vaporization characteristic of the fuel is determined by the control and regulation device using an output signal of a Lambda probe.

24. (previously presented) The method according to claim 23, wherein the vaporization characteristic of the fuel is determined by the control and regulation device based on a mathematical vaporization model.

25. (canceled).

26. (previously presented) The method according to claim 23, wherein the feed pressure is adjusted to an as low as possible minimum pressure value such that cavitation caused by vaporization of the fuel is avoided.

27. (previously presented) The method according to claim 23, wherein the fuel temperature is determined by the control and regulation device based on a mathematical temperature model.

28. (previously presented) The method according to claim 23, wherein the fuel temperature is acquired by a temperature sensor.

29. (previously presented) The method according to claim 23, wherein the vaporization characteristic of the fuel is determined using a fuel volume adaptation algorithm.

30. (previously presented) The method according to claim 23, wherein the first pump is a low-pressure pump, and a second pump embodied as a high-pressure pump is connected to and arranged downstream from the low-pressure pump relative to a fuel pumping direction.